B

Biology Standard
B.8.b.

Teacher's Masters

California Education and the Environment Initiative

# Biological Diversity: The World's Riches

**California Education and the Environment Initiative**

Approved by the California State Board of Education, 2010

**The Education and the Environment Initiative Curriculum is a cooperative endeavor of the following entities:**

California Environmental Protection Agency
California Natural Resources Agency
California State Board of Education
California Department of Education
Department of Resources Recycling and Recovery (CalRecycle)

**Key Partners:**

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# Contents

## Lesson 1 Earth's Rich Biodiversity

None required for this lesson.

## Lesson 2 Levels of Biological Diversity

None required for this lesson.

## Lesson 3 Responses to Change

None required for this lesson.

## Lesson 4 Surviving Environmental Change

None required for this lesson.

## Assessments

Name: _____

**Instructions:** Select the best answer and circle the correct letter. (2 points each)

1. Which of the following statements describes a biome?
   a. a specific area containing an identifiable set of interdependent species that interact with each other and the abiotic components found there
   b. large regions with similar ecosystems characterized by climatic conditions and the type of plant that dominates the area
   c. the place where an organism lives and meets its needs
   d. an area set aside to protect resources and natural systems

2. The geographic extent and biological diversity of ecosystems varies with _____.
   a. the number of niches available
   b. latitude
   c the number of predators in an area
   d. Both a and b.

3. Which factor(s) affect the capacity of a natural system to recover from human-caused alterations?
   a. the scale of the alteration, whether it is local, regional, or national
   b. the scope of the alteration, whether it is small or large
   c. the duration of the alteration, how long it lasts
   d. All of the above.

4. High biological diversity _____.
   a. increases the geographic extent of an ecosystem
   b. decreases the capacity of a natural system to recover from a naturally occurring event
   c. increases the likelihood that some species in an ecosystem can survive environmental changes
   d. only occurs in tropical rainforests and salt marshes

5. Which human practices influence the biological diversity of different biomes?
   a. logging and mining
   b. farming
   c. urban development
   d. All of the above.

Name: _____

**Instructions:** Answer the following questions and complete the tasks in the spaces provided. (10 points each)

6. Why does biological diversity vary greatly in different ecosystems across the globe?

7. Why is the Sonoran Desert more biologically diverse than the Great Basin Desert?

8. Describe three ways in which large-scale farming can influence species composition and the geographic extent of a rainforest.

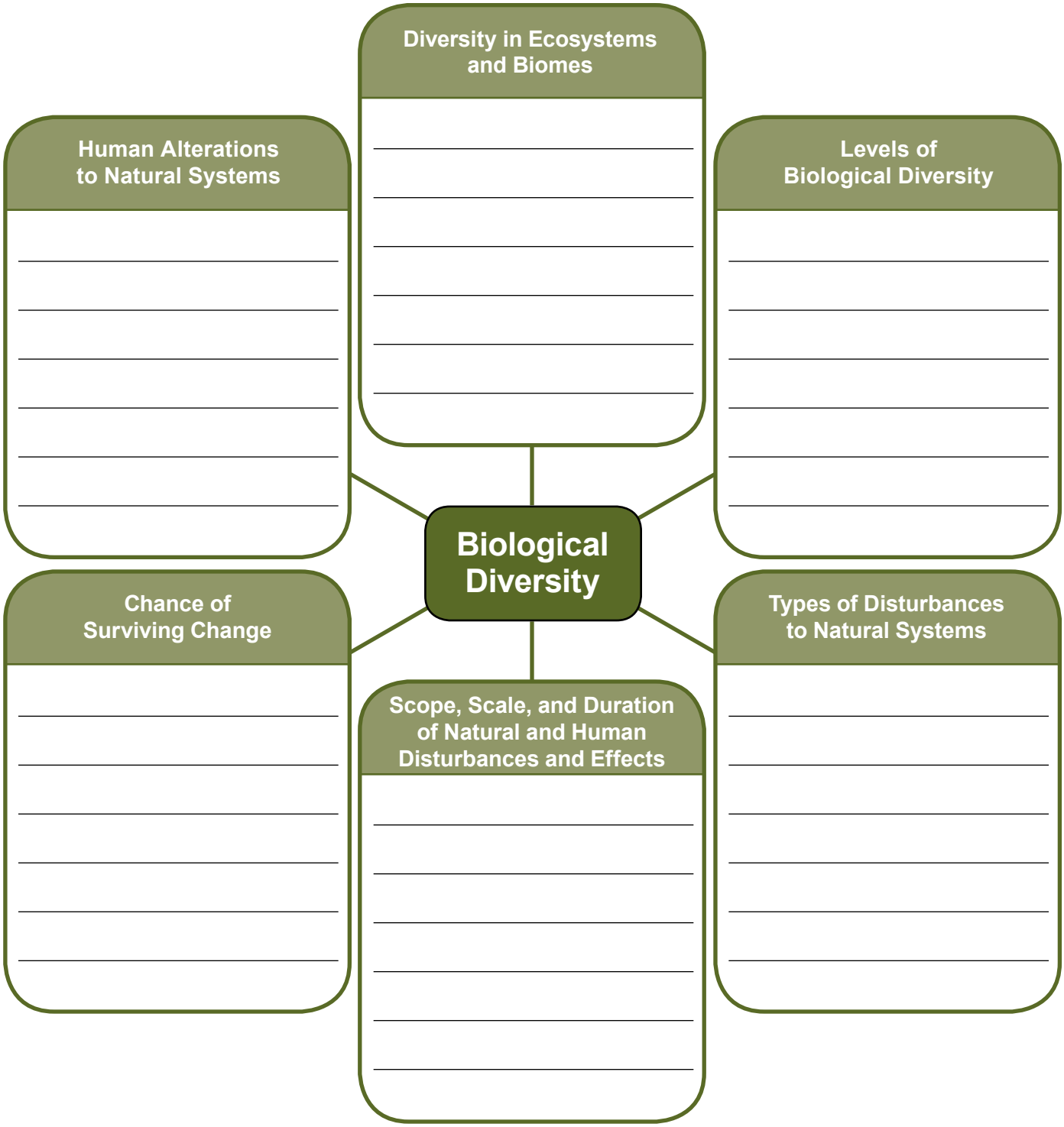
Name: _____

9. The duration, scale, and scope of a disturbance can influence the capacity of an ecosystem to recover and the rate of that recovery. Describe and give at least two examples of this statement.

10. Why does high biological diversity increase the likelihood that some organisms will survive major changes in the environment?

Name: _____

**Instructions:** Using all of your assignments from the unit, create a concept map that explains the relationship between biological diversity and the topics in each box. State at least two key points under each heading in the spaces provided. Use specific examples from the unit to support your positions. (10 points for each box)

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